UOP-1000 Series UV Offset Matte Texture Ink
Technical Data Sheet

1. Product Overview

Specialty UV offset matte effect ink designed for sheet-fed offset presses equipped with anilox coating units. Formulated to replace traditional screen-printed sand texture varnishes with high press productivity and fine texture consistency. Delivers uniform matte granularity, low specular glare, and excellent anti-scuff properties. Primarily applied to luxury liquor packaging, premium gift boxes, and cosmetics folding cartons.

2. Product Features

- **Delicate Matte Granularity:** Uniform sand/matte grain structure, effectively replacing screen-printed sand texture;
- **Ultra-Low Gloss:** Soft diffuse reflection, eliminating glare and imparting an understated luxury feel;
- **High Press Productivity:** Applied via offset coating units at up to 7,000–10,000 sheets/hour, substantially outperforming screen printing;
- **Superior Adhesion & Scuff Resistance:** Strong bonding to primed or unprinted substrates; durable surface scuff resistance;
- **Eco-Friendly & Low Odor:** Low volatile emissions and low residual odor after thorough UV cure.

3. Suitable Substrates

Suitable for various paper substrates including gold/silver foil board, SBS ivory board, and coated art paper.

4. Technical Specifications

Property	Unit	Typical Value	Test Method / Notes
Appearance & Color	-	Milky white liquid	Visual inspection
Viscosity	s	1000–2000	Rotational Viscometer
Solid Content	%	≥90	GB/T 33374-2016
Gloss (60°)	GU	10–30	60° angle, GB/T 13217.2-2024

5. Application Guidelines

Ink Preparation	Contains specialty matting additives and micro-wax powders. Mild phase separation may occur upon standing; stir thoroughly before use.
Plate / Cylinder Specs	40–60 lines/inch (LPI) anilox roller.
Dilution Ratio	Use dedicated UV thinner. Dilution ratio varies by process; please consult HCOLOR.
Press Viscosity	Ready-to-use as supplied.
Press Speed	7,000–10,000 sheets/hour.
Drying Method	High-pressure mercury UV lamp system.
Equipment Cleaning	Clean with ethyl acetate or dedicated screen/wash during short press halts.
Application Note	Prior to mass production, verify interlayer adhesion with base inks and rub resistance under actual plant conditions.

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
UOP-1268D	Replaces screen sand texture; delicate and uniform tactile grain	Paper substrates	Liquor cartons, luxury folding 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.