SNG60000 Series Solvent-based Paper Gravure Ink
Technology Data Sheet

1. Product Overview

SNG60000 Series is an ester/alcohol-soluble rotogravure ink specially developed for cigarette packaging printing, widely applied to cigarette outer cartons, inner frame liners, tipping paper, and related tobacco packaging. It is suitable for rotogravure printing on woodfree paper, coated art paper, matte coated paper, white cardboard / grey-back duplex board, kraft paper, pressure-sensitive paper, laser transfer paper, metallized transfer paper, and laminated papers. Formulated with an ester/alcohol-soluble resin system, it delivers fast drying kinetics and a low residual odor profile.

2. Product Features

- **High Color Density:** Highly saturated, vibrant, and uniform color laydown.
- **Strong Adhesion:** Superior adhesion to various papers, transfer papers, and laminated substrates.
- **Fast Drying:** Rapid solvent release from ester/alcohol-soluble system, facilitating high-speed running.
- **Excellent Printability:** Crisp dot reproduction and clean graphic definition.
- **Superior Rub & Scuff Resistance:** Highly durable ink film with outstanding abrasion resistance.
- **Low Odor & Eco-Friendly:** Clean ester/alcohol-soluble formulation with low odor, ideal for tobacco packaging.

3. Suitable Substrates

Suitable for woodfree paper, coated art paper, matte coated paper, white cardboard / grey-back duplex board, kraft paper, pressure-sensitive paper, laser transfer paper, metallized transfer paper, and laminated papers.

4. Technical Specifications

Property	Unit	Typical Value	Test Method / Notes
Appearance & Color	-	Viscous liquid in various colors	Visual inspection
Viscosity	s	35–65	Zahn #2 cup, 25°C
Solid Content	%	-	Oven method, 120°C × 2 h
Gloss (60°)	GU	-	60° angle

5. Application Guidelines

Ink Preparation	Stir thoroughly for 5–10 minutes prior to use. Filtration through ≥200 mesh screen is recommended before loading onto press. 1-pack system; consume promptly after opening.
Plate / Cylinder Specs	Gravure / Surface: cylinder screen 150–250 LPI, cell depth 35–55 µm, moderate doctor blade pressure.
Dilution Ratio	Standard diluent: n-Propyl acetate = 100; Dilution ratio 30%–50% (adjust based on press speed and target operating viscosity).
Press Viscosity	Operating viscosity 16–22 s (Zahn #2 cup, 25°C).
Press Speed	80–250 m/min (suitable for high-speed printing; optimize based on press model and drying capacity).
Drying Method	Hot air drying, air temperature 60–90°C; ensure thorough drying before rewinding.
Equipment Cleaning	Clean printing cylinders and ink circulating systems promptly after printing with solvent diluent to prevent ink drying and clogging.
Application Note	Prior to initial commercial production, thorough trials must be conducted under actual operating conditions to verify ink adhesion, drying profile, and post-finishing compatibility on target substrates.

6. Regulatory & Safety

Regulatory Compliance	Complies with RoHS and REACH (SVHC) directives.
Food Contact Statement	Formulated for non-direct food contact secondary packaging. If specialized food contact compliance or low-migration performance is required, project-specific technical evaluation and formulation confirmation by HCOLOR are required.
Usage Note	VOC content complies with domestic cigarette packaging regulations; suitable for domestic cigarette packaging printing.
Safety Data Sheet (SDS)	Safety Data Sheets (SDS) are available upon request.
User Responsibility	Users must independently verify product suitability, regulatory compliance, and processing performance under actual commercial production conditions prior to full-scale adoption.

7. Packaging & Storage

Standard Packaging	Standard packaging: 18 kg / drum. Custom packaging: Other specifications available upon request.
Storage Conditions	Store tightly sealed in original containers. Keep in a dry, cool, and well-ventilated warehouse at 5–35°C, away from fire, heat sources, and strong oxidizers. Avoid direct sunlight and high temperatures; protect from frost. Keep containers tightly sealed to prevent solvent evaporation.
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
SNG60000 Series	High color density / Ester/alcohol-soluble system	Paper and laminated papers	Cigarette outer packaging / Inner frame liners / Tipping paper / Packaging paper

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., high-speed rotogravure operations), 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 customized gloss levels, specific rub/crease-crack resistance requirements, or specialized finishing formulations 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.