WPG-A60000 Series Water-Based Edge Banding Ink
Technology Data Sheet

1. Product Overview

WPG-A60000 Series is a specialized water-based edge banding ink engineered for decorative furniture surfaces. Specially formulated for edge banding applications across furniture desktops, wall paneling, doors, and cabinetry. It delivers outstanding gravure surface printing performance on rigid PVC and ABS substrates, featuring superior lightfastness and weatherability.

2. Product Features

- **High Color Density:** Rich, vivid, and saturated coloration with excellent opacity.
- **Strong Adhesion:** Superior bond strength and anchorage on rigid PVC and ABS substrates.
- **High Lightfastness:** Outstanding UV and light resistance, effectively resisting fading under light exposure.
- **Superior Flexibility:** Excellent film elasticity and flexibility, well suited for edge banding bending and profiling processes.
- **Excellent Printability:** Crisp woodgrain and decorative texture reproduction with fine dot definition.
- **Low-Odor & Eco-Friendly:** Water-based formulation with low odor and low environmental footprint.

3. Suitable Substrates

Suitable for rigid PVC, ABS, and related decorative edge banding polymer substrates.

4. Technical Specifications

Property	Unit	Typical Value	Test Method / Notes
Appearance & Color	-	Viscous liquid in various colors	Visual inspection
Viscosity	s	40–65	Toyo #3 cup, 25°C
pH Value	-	8.0–9.5	25°C
Solid Content	%	-	Oven drying, 130°C × 2 h
Gloss (60°)	GU	-	60° angle

5. Application Guidelines

Ink Preparation	Stir thoroughly for 5–10 minutes prior to use. Filtration through a ≥200 mesh screen is recommended before loading onto press. Single-component system; consume promptly after opening.
Plate / Cylinder Specs	Gravure cylinder screen 150–250 LPI, moderate cell depth, moderate doctor blade pressure.
Dilution Ratio	Deionized water or dedicated aqueous diluent, addition ratio 1%–10% (adjust based on press speed and target operating viscosity).
Press Viscosity	Operating viscosity 40–55 s (Toyo #3 cup, 25°C).
Press Speed	35–55 m/min (suitable for high-speed printing; optimize based on press model and drying capacity).
Drying Method	Hot air drying, air temperature 60–110°C; ensure complete drying before rewinding.
Equipment Cleaning	Clean printing cylinders and ink circulating systems promptly after printing with water or dedicated aqueous cleaning agents 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 decorative furniture edge banding (desktops, wall panels, doors, cabinets) and non-food contact applications. For direct-contact applications involving food or pharmaceuticals, specific customer compliance evaluations are required.
Usage Note	VOC content complies with China national standard GB 38507-2020.
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: 20 kg / plastic drum. Custom packaging: 1 kg, 5 kg, 200 kg or 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, protected from direct sunlight and rain. Strictly protect from freezing; prevent winter frost damage or high-temperature degradation.
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
WPG-A60000 Series	High color density / Superior lightfastness / High film flexibility	Rigid PVC, ABS plastic profiles	Furniture edge banding (desktops, wall panels, interior doors, cabinets)

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.