PNT - CHEM

TECHNICAL DATA SHEET (TDS)
UV FLEXOGRAPHIC PRINTING INKS

1. PRODUCT IDENTIFICATION

UV ink series designed for flexible packaging and pressure-sensitive label applications, specifically formulated for curing under LED lamp systems.

Product Name	PNT UV Flexo Series
Product Type	UV Curable Flexographic Printing Ink
Application	Pressure Sensitive Labels, Flexible Packaging
Printing Method	Narrow Web UV Flexographic
Available Colors	CMYK Colors
Recommended Substrates	PE, PP, PET, PVC, Coated Paper

2. PRODUCT DESCRIPTION

PNT UV Flexo Series is a high-performance UV curable flexographic ink system developed for modern label and packaging applications requiring high print quality, fast curing performance and excellent press stability. The series is formulated to provide strong adhesion, high gloss, optimized viscosity behavior and reliable performance on various non-absorbent substrates used in narrow web printing systems.

3. MAIN FEATURES

- Designed exclusively for use on printing presses equipped with UV LED (ultraviolet light-emitting diode) curing systems.
- High color density with excellent gloss performance
- Superior transfer efficiency and stable print performance
- Rapid UV curing response enabling high productivity
- Suitable for high-speed printing applications
- Excellent resistance to scratching and rubbing
- Low odor formulation for improved working conditions
- Consistent rheological properties ensuring stable press performance
- Reliable adhesion performance on appropriately selected substrates
- Solvent-free formulation

4. TECHNICAL PROPERTIES

Property	Specification
Appearance	Pigmented Viscous Liquid
Curing System	UV Radical Polymerization
Gloss	High
Adhesion	Excellent on treated substrates
Abrasion Resistance	Good
Chemical Resistance	Application dependent
Light Fastness	Medium – High
Recommended Surface Tension	>38 dyn/cm
Shelf Life	12 Months
Storage Temperature	15°C – 25°C

5. PRINTING RECOMMENDATIONS

- Recommended anilox range: 3 – 6 cm^3/m^2
- UV lamp performance should be checked regularly
- Ink should be mixed thoroughly before use
- Substrate surface tension should be verified before production
- Press conditions should remain stable during printing
- Overcuring and undercuring conditions should be avoide

6. RECOMMENDED SUBSTRATES

- PE (Polyethylene)
- PP (Polypropylene)
- PET (Polyester)
- PVC
- Coated paper
- Metallized films
- Self-adhesive label materials

7. PACKAGING

Standard Packaging: 5 KG buckets

8. STORAGE & SHELF LIFE

- Optimal Storage Conditions: Between 15°C and 25°C.
- Store in original, tightly closed packaging
- Keep in a cool, dry and dark environment
- Protect from direct sunlight, heat sources and frost
- Ink should be thoroughly stirred before application to ensure homogeneity
- Containers must be closed immediately after use

9. CLEANING / HANDLING

- All printing equipment should be cleaned immediately after use with appropriate UV ink cleaning agents recommended for UV systems. Dried ink residues should be removed using suitable industrial cleaning solutions compatible with press components.
- During handling, appropriate personal protective equipment (PPE) such as gloves and protective eyewear should be used. Direct contact with skin should be avoided. Adequate ventilation must be ensured in the working area.
- Contamination with other ink systems, solvents, or foreign materials should be strictly avoided to maintain product performance and process stability.

10. REMARKS / DISCLAIMER

- Before commencing production, preliminary printing trials are strongly recommended to ensure suitability for the intended application and desired end-use properties
- Substrate compatibility, printing conditions, and post-processing operations (e.g. varnishing, lamination, or additional coatings) should be verified prior to full production
- Performance results may vary depending on substrate type, machine settings, and printing conditions
- It is the user's responsibility to ensure that the product is suitable for the specific application requirements
- Recommendations provided are based on our current knowledge and experience and do not constitute a guarantee of final product performance
- Any use of the product outside the recommended conditions should be evaluated through prior testing

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