



**ECOTECH WFP SERIES**

**TECHNICAL DATA SHEET WATER BASED FLEXO PRINTING INKS**

1. APPLICATION FIELDS:

Free radical curing water based flexo printing ink series for self adhesive labels, flexible packaging and foldable cartons:

- corona pre-treated PE, BOPP, OPP and OPP co-extruded
- Top coated PP and PE
- Pre-coated PET
- PVC
- NC-lacquered aluminium
- coated and uncoated paper
- cardboard articles

Substrates may differ in their chemical structure or method of manufacture. A test for suitability must always be carried out before printing. Antistatic, mould release agents and slip additives may have negative effects on adhesion, and should be detected and removed prior to printing.

2. CHARACTERISTICS:

Ecotech water based Flexo inks corresponds to the newest requirements of the printing market and is therefore silicone free and contains no solvents. All colors keep their low viscosity also during storage over the guaranteed shelf life. Due to the low viscosity level, the ink series has excellent printing properties. The inks of this series are constitutionally free from toxic elements and solvents. The raw materials used meet with the limits stipulated by the GOTS regulation. The products are distinguished by the high color strength and brilliance.

3. PROCESSING INSTRUCTIONS:

3.1 PRE-TREATMENT: We recommend a corona pre-treatment of at least 38 – 44 dyn/cm.

3.2 RECOMMENDED ANILOX ROLLER CONFIGURATIONS:

Parameter	Process Colours	Text	Area
Line / cm	320-400	200 - 240	140 – 160
Line / inch	800 – 1000	500 - 600	350 - 400
Volume cm <sup>3</sup> /m <sup>2</sup>	3.0 – 4.0	4.5 – 5.5	7.5 – 9.0
Angle / Grade	60°	60°	60°

3.3 PRINTING EQUIPMENT:

This ink series is suitable for all commonly used Flexo Printing machines. While changing from one ink series to another, e.g. changing from solvent based systems, a proper cleaning of all machine parts and components is necessary in order to avoid any incompatibility problems due to the different chemical character of the different ink systems.

Individual ink systems among one another can influence the printing results negatively. This Ink series can be printed with all printing plate types developed for the usage of normal inks.

4. **CURING CONDITIONS:**  
Suitable for medium pressure mercury lamps with 120 - 200 W/cm or Hot Air temperature up to 70 – 80 deg C. These Inks has good curing properties and is suitable for a printing speed up to 120 m/min depending on the colour shade.
5. **CLEANING:**  
We recommend the below products:  
Anilox and machine cleaner water can be used  
Printing plate cleaner water can be used  
The advice given by the printing plate manufacturers regarding the cleaning of the printing plate should always be observed.
6. **RANGE OF COLOURS:**  
Refer Price List
7. **ADDITIVES:**  
Thinner Mixture of IPA water in ratio of 30:70 can be used for faster drying and viscosity adjustment with at a maximum addition of 5 %.  
Adhesion Promoter can be added to increase adhesion The Adhesion Promoter increases the reactivity and therefore the curing speed of the ink. A maximum addition of 3% is recommended.  
Levelling Aid In order to further enhance the flow characteristics of the ink, an addition of approx. 0.5 – 2 % of the Levelling Aid can be used..
8. Kindly Go through To Do List before taking trails. Also Adhesion properties will improve after 48 hours of printing and complete adhesion properties will be achieved after 7 days but that does not mean printing will not get cured it will be touch dry immediately.

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