



WATER-BASED INKS: THE SUSTAINABLE SOLUTION FOR PRINTING ON FLEXIBLE PACKAGING

Laura Pomés / March 2021



## **QUIMOVIL, THE COMPANY**

#### SPECIALISTS in the design and manufacture of printing inks and coatings

- 60 years' experience
- Headquarters in Barcelona
- Sales offices in Madrid and Valencia
- Presence in South America, Africa, Australia and Europe

Quimovil offers a broad *WATER-BASED* inks and coatings PORTFOLIO for:

- Flexible packaging
- Corrugated board
- Primers
- Sacks and bags
- Tissue
- Labels

**SERVICES:** 

- Direct Technical support
- Consulting
- Trainings
- Strategic environmental services

#### WE ARE EXPERTS IN PROVIDING SOLUTIONS WITH TAILORED SERVICES THAT MEET THE CURRENT AND FUTURE NEEDS OF OUR CLIENTS

Tell us what you need, and if it doesn't exist, we'll design it for you



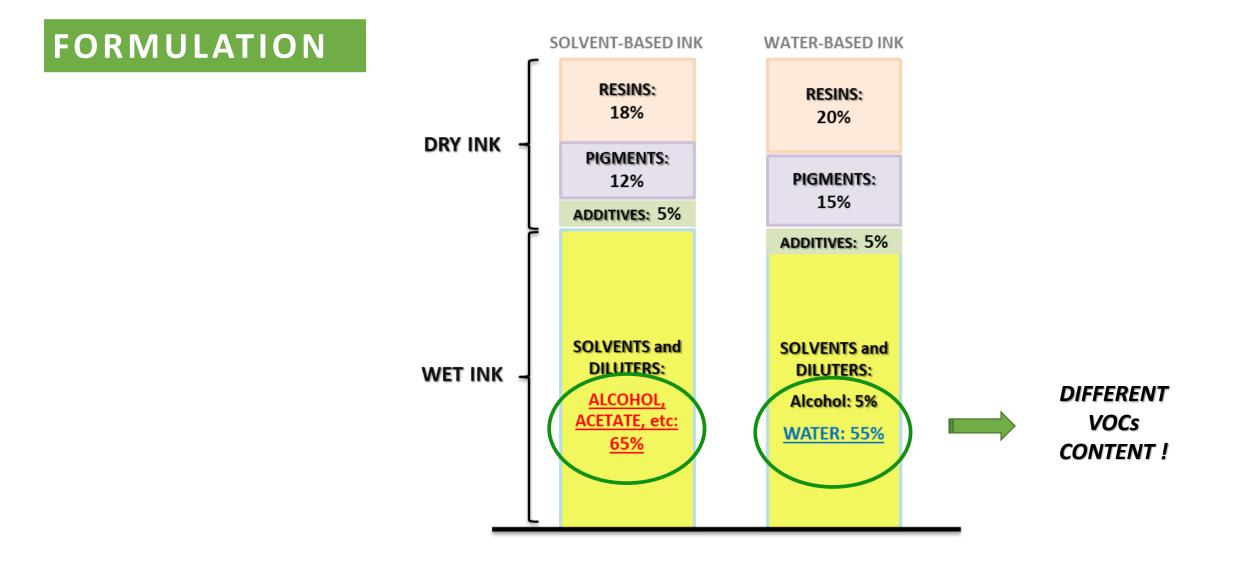
## WHY WATER-BASED INKS?

Why not...





## WATER-BASED INKS compared with SB inks





## **WATER-BASED INKS compared with SB inks**

#### ADVANTAGES

- Non-flammable:
  - No special handling or storage requirements No explosion proof equipment is necessary
  - - More stable on press (including pH)

    - Higher yieldHigher photopolymer plates useful life
      - Very low VOCs content:
        - VOCs treatment is not necessary
        - Less solvent consumption



## WATER-BASED INKS compared with SB inks

#### DISADVANTAGES

- Water evaporates slower:
  - Less drying speed
  - **\_** Less resolubility

#### THE SAME PROPERTIES

- Cleaning process
- Waste management
- Printing quality: Adhesion, resistances, colour intensity, opacity, bond strengths, etc.
- <u>FINAL APPLICATIONS</u>: Flexible packaging, corrugated board, labels, sacks and bags, etc.



## WATER-BASED INKS FOR FLEXIBLE PACKAGING

#### ✤ <u>SURFACE PRINTING:</u>



Waterbased inks for diferent applications !

- AQUAFILM
- QUIMO-IRIS (for compostable packaging)
- AQUAPLUS
- LAMIN-FLEX

REVERSE PRINTING:
MATERIAL\*
INKS
ADHESIVE
MATERIAL
FOOD

\* PET, BOPP mostly

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## **FLEXIBLE PACKAGING**

### CASE STUDY - SERIE LAMIN-FLEX

#### **PROPERTIES**:

- Reverse printing
- Water-based flexographic ink
- Polyurethane based
- Printing on PET and BOPP
- Lamination with BOPP, PE, PET Met, BOPP Met, etc.
- Solventless 2K Adhesive
- Applications: Food packaging, PET food, etc.

#### **PERFORMANCE:**

- High press stability
- No blocking
- High resolubility
- Fast drying speed
- Good extensibility
- High strength and transparence of colours
- High bond strength after lamination



#### **FLEXIBLE PACKAGING**

#### CASE STUDY - SERIE LAMIN-FLEX





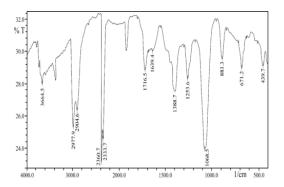
## **SERIE LAMIN-FLEX**

#### **FOOD SAFETY RISK ANALYSIS:**

- **OVERALL MIGRATION,** according to UNE-EN 1186-4
- SPECIFIC MIGRATION OF PRIMARY AROMATIC AMINES (PAA), according to UNE-EN 13130-1
- SCREENING OF COMPOUNDS, on sample and on migration solution

#### **POSITIVE RESULTS\***

\*According to Regulation (EU) N. 10/2011





### **SERIE LAMIN-FLEX**

#### **INK CARBON FOOTPRINT**:

- CARBON FOOTPRINT OF RAW MATERIALS
- CARBON FOOTPRINT OF INK MANUFACTURING PROCESS
- CARBON FOOTPRINT OF WASTE VALORIZATION

WATER-BASED INKS 25 - 35 % LESS THAN SOLVENT-BASED INKS

# THANK YOU



