**Context**

Coating industry – Textile field
- Textile personalization demands used to grow up the last decade
  - Customers always want new design in every area such as sport, lifestyle or luxury
  - Clothes’ manufacturers are looking for new solutions

Printable coating offers an unlimited way of personalization
- Use of a lot of dangerous products for both human health and environment
- Restrictions are increasingly strict in this area

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**Objectives**

Formulation
- Change of the entire formulation:
  - Comply with new regulations on working conditions
  - Reduce VOC emissions
  - Reduce environmental impact
  - Keep product labels
  - Incorporate bio-sourced raw materials

Process
- The process will be adapted to formulation
- Productivity with new formulation has to be equivalent to solvent-based one at least
- The different product layers have to be assembled with strong adhesion

Properties
- The coating has to be printable by inkjet
- At the end, the new product has to respect the actual specifications at least

**Methods**

Surface characterization
- Over films:
  - Contact angle measurements
  - Surface roughness analysis

- Over both raw materials and solvent-based coatings formulation:
  - Rheology of both raw materials
  - Surface tension: Du Noüy and Whilelmy methods

MODIFICATION OF THE PROPERTIES OF POLYMER SURFACES BY AN ENVIRONMENTALLY FRIENDLY PRINTABLE COATING

MODIFICATION DES PROPRIÉTÉS DE SURFACES POLYMÈRES PAR UN VERNIS IMPRIMABLE RESPECTUEUX DE L’ENVIRONNEMENT